Notice No. JMC:13032001.bah

Public Notice Beginning Date: April 9, 2015

Public Notice Ending Date: May 11, 2015

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET

of

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Permittee: Fox Metro Water Reclamation District 682 State Route 31 Oswego, Illinois 60543 Name and Address of Facility: Fox Metro WRD - STP 682 State Route 31 Oswego, Illinois 60543 (Kendall County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named Permittee. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. Interested persons are invited to submit written comments on the draft Permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the Permit applicant. The NPDES Permit and notice numbers must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft Permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft Permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final Permit is issued. For further information, please call Jamie Cowles at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic and industrial wastewater for the Fox Metro Reclamation District which serves the City of Aurora, Village of Oswego, Village of North Aurora, Village of Montgomery, Village of Sugar Grove, City of Yorkville, City of Batavia, Boulder Hill Subdivision, Moecherville and rural single users.

The length of the Permit is approximately 3 years.

The main discharge number is 001. The seven day once in ten year low flow (7Q10) of the receiving stream, Fox River is 152 cfs.

The design average flow (DAF) for the facility is 42 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 85 MGD. Treatment consists of screening, grit removal, primary clarification, aeration, secondary clarification, tertiary filtration, chlorination/dechlorination, sludge thickening/storage, thermophilic/intermediate/mesophilic anaerobic digestion, centrifuge dewatering and land application of biosolids.

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Flows which exceed the DMF (85 MGD) of the secondary treatment plant would be diverted to the wet weather excess flow treatment unit, which can treat up to 54 MGD of excess flow for a total combined treatment capacity of 139 MGD. Excess flow wastewater is either treated utilizing enhanced primary clarification or stored and returned to the headworks of the main treatment plant depending on the intensity of the wet weather event. Excess flow that is treated and discharged from the clarifiers without being returned to the headworks flows into the tertiary filters where it combines with the main treatment plant system wastewater. The combined flow is then chlorinated and dechlorinated before being discharged to the Fox River.

This Permit authorizes discharge from one Combined Sewer Overflow (CSO) in accordance with 35 III. Adm. Code 306.305 and PCB Order 85-224 dated July 13, 1988 into the Fox River. This Permit includes the requirements of a CSO Long-Term Control Plan consistent with the requirements of the federal Clean Water Act and the federal CSO Control Policy of 1994.

During extreme wet weather conditions where flows exceed the capacity of the wet weather treatment plant (flows in excess of 139 MGD) the flow is diverted directly into the Fox River prior to the headworks from CSO Outfall 002. The diversion point (overflow weir) is located prior to screening and grit removal and receives no treatment prior to discharge. Any untreated discharge not meeting the conditions of this permit is prohibited.

The Long Term Control Plan (LTCP) was submitted March 31, 2010 and approved on July 31, 2014. The LTCP, once implemented, is presumed to have no more than an average of four (4) overflow events per year. Construction activities and completion dates are included in Special Condition 14 of the permit. Construction activities include improvements to the existing wastewater treatment facility, construction of the South Facility, and the Waubonsie flow equalization basin. The LTCP construction projects planned to meet the presumptive approach will be completed by December 31, 2019. The combined sewer system is owned by the City of Aurora. The City of Aurora LTCP includes the separation of sewers tributary to the Fox Metro WRD, additional storage within the collection system, a new pump station and force main, CSO structure modifications, and green infrastructure.

The Fox River will be monitored upstream and downstream of the outfall during construction to verify that water quality standards are met.

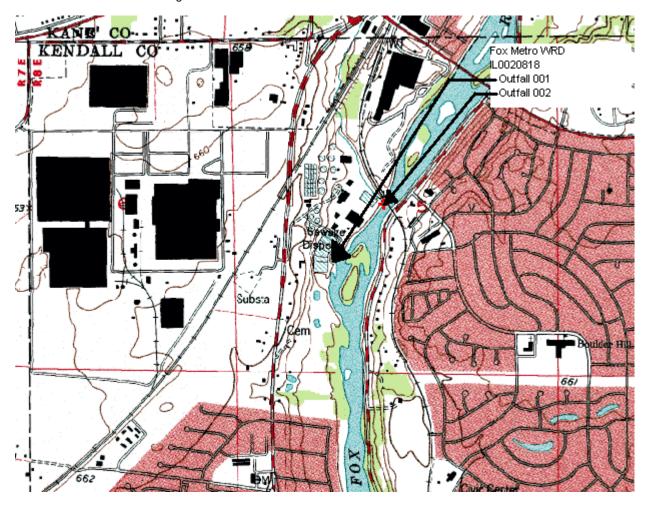
This treatment works has an approved pretreatment program. There are 12 noncategorical SIUs and 13 CIUs.

This Reissued Permit does not increase the facility's DAF, DMF, concentration limits, and/or load limits.

Application is made for the existing discharge(s) which is (are) located in Kendall County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Discharge <u>Number</u>	Receiving Stream	<u>Latitude</u>	<u>Longitude</u>	Stream Classification	Integrity Rating
001	Fox River	41° 42' 47" North	88° 21' 08" West	General Use	С
002	Fox River	41° 42′ 56″ North	88° 20′ 58.5" West	General Use	С

To assist you further in identifying the location of the discharge(s) please see the attached map.



The stream segment(s), Waterbody Segment DT-38, receiving the discharge from outfall(s) 001 and 002 is on the 303(d) list of impaired waters.

The following parameters have been identified as the pollutants causing impairment:

Potential Causes	Uses Impaired
alteration in stream-side or littoral vegetative cover (non-pollutant), aquatic/algae (non-pollutant) other flow regime alterations (non-pollutant), pH, phosphorus and total suspended solids (TSS)	aquatic life
mercury and polychlorinated biphenyls	fish consumption
fecal coliform	primary contact

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The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 42 MGD (design maximum flow (DMF) of 85 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day <u>DAF (DMF)*</u>		CONCENTRATION LIMITS mg/L				
<u>Parameter</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Daily <u>Maximum</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Daily <u>Maximum</u>	<u>Regulation</u>
CBOD ₅ **	3,503 (7,089)		7,006 (14,178)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids**	4,203 (8,507)		8,407 (17,014)	12		24	35 IAC 304.120 40 CFR 133.102
рН	Shall be in the	range of 6 to 9 S	Standard Units				35 IAC 304.125
Fecal Coliform	The monthly ge of the samples	ometric mean st collected shall e	nall not exceed 200 xceed 400 per 100	0 per 100 mL 0 mL (May th	and no mo rough Octo	re than 10% ber)	35 IAC 304.121
Chlorine Residual						0.05	35 IAC 302.208
Ammonia Nitrogen: March-May/SeptOct.	525 (1,063)	1,331 (2,694)	1,541 (3,119)	1.5	3.8	4.4	35 IAC 355 and 35 IAC 302
June-August	525 (1,063)		1,121 (2,268)	1.5		3.2	
NovFeb.	701 (1,418)		1,541 (3,119)	2.0		4.4	
			Annual <u>Average</u>			Annual <u>Average</u>	
Total Phosphorus (as P)***			350 (709)			1.0	35 IAC 304.123
Total Nitrogen	Monito	r Only					35 IAC 309.146
Dissolved Phosphorus	Monito	r Only					35 IAC 309.146
Nitrate/Nitrite	Monito	r Only					35 IAC 309.146
Total Kjeldahl Nitrogen (TKN)	Monito	r Only					35 IAC 309.146
Alkalinity	Monito	r Only					35 IAC 309.146
Temperature	ature Monitor Only						35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen March-July				N/A	6.25	5.0	35 IAC 302.206
August-February				6.0	4.5	4.0	

^{*}Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L).

^{**}BOD $_5$ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105.

^{***} The annual phosphorus limit has been included in the permit pending completion of the Fox River Implementation Plan (FRIP). A compliance schedule to provide the facility additional time to comply with the phosphorus limit has been included in this draft Permit. The proposed compliance schedule includes time to evaluate the recommendations of the FRIP and then make any necessary modifications to the existing treatment facilities.

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This draft Permit also contains the following requirements as special conditions:

- 1. Reopening of this Permit to include different final effluent limitations.
- 2. Operation of the facility by or under the supervision of a certified operator.
- 3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.
- 4. More frequent monitoring requirement without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.
- 5. Prohibition against causing or contributing to violations of water quality standards.
- 6. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.
- 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.
- 8. Effluent sampling point location.
- 9. Seasonal fecal coliform limits.
- The Permittee implements and administers an industrial pretreatment program pursuant to 40 CFR §403.
- 11. Submission of annual fiscal data.
- 12. The Permittee is required to perform biomonitoring tests in the 18th, 15th, 12th and 9th months prior to the expiration date of the permit, and to submit the results of such tests to the IEPA within one week of receiving the results from the laboratory.
- 13. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
- 14. An authorization of combined sewer and treatment plant discharges.
- 15. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or an approved Fox River Water Quality Study.
- 16. A requirement for participation in the Fox River Study Group.
- 17. Monitoring for total phosphorus, dissolved phosphorus, nitrate/nitrite, total kjeldahl nitrogen (TKN), ammonia, total nitrogen (calculated), alkalinity and temperature once a month.
- 18. Compliance schedule for meeting phosphorus limits.
- 19. Burden reduction.
- 20. Site specific data for pH and temperature.
- 21. Capacity, Management, Operations and Maintenance (CMOM) requirements.
- 22. Controlling the sources of infiltration and inflow into the sewer system.
- 23. Prohibited Discharge after Intake Screens

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: Issue Date: Effective Date:

Name and Address of Permittee: Fox Metro Water Reclamation District 682 State Route 31 Oswego, Illinois 60543 Facility Name and Address: Fox Metro WRD - STP 682 State Route 31 Oswego, Illinois 60543 (Kendall County)

Receiving Waters: Fox River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E. Manager, Permit Section Division of Water Pollution Control

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Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 42 MGD (design maximum flow (DMF) of 85 MGD).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day <u>DAF (DMF)*</u>			CONCENTRATION LIMITS mg/L				
<u>Parameter</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Daily <u>Maximum</u>	Monthly Average	Weekly Average	<u>Daily</u> <u>Maximum</u>	Sample <u>Frequency</u>	Sample <u>Type</u>
Flow (MGD)							Continuous	
CBOD ₅ ** ¹	3,503 (7,089)		7,006 (14,178)	10		20	2 Days/Week	Composite
Suspended Solids ¹	4,203 (8,507)		8,407 (17,014)	12		24	2 Days/Week	Composite
pН	Shall be in the r	range of 6 to 9	Standard Units				2 Days/Week	Grab
Fecal Coliform***	The monthly geometric mean shall not exceed 200 per 100 mL ar of the samples collected shall exceed 400 per 100 mL (May through the samples).					5 Days/Week	Grab	
Chlorine Residual***						0.05	5 Days/Week	Grab
Ammonia Nitrogen: As (N) March-May/SeptOct.	525 (1,063)	1,331 (2,694) 1,541 (3,119)	1.5	3.8	4.4	2 Days/Week	Composite
June-August	525 (1,063)		1,121 (2,268)	1.5		3.2	2 Days/Week	Composite
NovFeb.	701 (1,418)		1,541 (3,119)	2.0		4.4	2 Days/Week	Composite
			Annual <u>Average</u>			Annual <u>Average</u>		
Total Phosphorus (as P)****			350 (709)			1.0	1 Days/Week	Composite
Total Nitrogen	Monitor Only						1 Day/Month	Composite
Dissolved Phosphorus	Monitor Only						1 Day/Month	Composite
Nitrate/Nitrite	Monitor Only						1 Day/Month	Composite
Total Kjeldahl Nitrogen (TKN)	Monitor Only						1 Day/Month	Composite
Alkalinity	Monitor Only						1 Day/Month	Composite
Temperature	Monitor Only						1 Day/Month	Grab
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				N/A	6.25	5.0	2 Days/Week	Grab
August-February				6.0	4.5	4.0	2 Days/Week	Grab

^{*}Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

^{**}Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

^{***}See Special Condition 9.

^{****}See Special Condition 18. The annual phosphorus limit has been included in the permit pending the completion of the Fox River Implementation Plan. (continued on next page)

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall (continued)

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a geometric mean and as a percentage of samples exceeding 400 per 100 mL.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual shall be reported on DMR as daily maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Total Nitrogen shall be reported on the DMR as a daily maximum value.

The rolling annual monthly average total phosphorus values shall be computed monthly beginning 12 months after the effective date of the permit and shall include the previous 12 months of data. The rolling annual monthly average, monthly average and daily maximum values for total phosphorus shall be reported on the DMR. The rolling annual monthly average shall be calculated by adding the sum of the total phosphorus monitoring values from the previous 12 months of data expressed in milligrams/liter and divided by the number of samples collected.

 $^{^{1}}$ BOD $_{5}$ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD $_{5}$ concentration to determine the effluent BOD $_{5}$ concentration.

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

<u>Parameter</u>	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD ₅	2 Days/Week	Composite
Suspended Solids	2 Days/Week	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

 BOD_5 and Suspended Solids shall be reported on the DMR as a monthly average concentration.

Special Conditions

<u>SPECIAL CONDITION 1</u>. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws and regulations. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

<u>SPECIAL CONDITION 3</u>. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

<u>SPECIAL CONDITION 4</u>. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice.

<u>SPECIAL CONDITION 5</u>. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302.

<u>SPECIAL CONDITION 6.</u> The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/net-dmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Attention: Compliance Assurance Section, Mail Code # 19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

<u>SPECIAL CONDITION 8.</u> Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

<u>SPECIAL CONDITION 9</u>. Fecal Coliform limits for Discharge Number 001 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit.

SPECIAL CONDITION 10.

- A. Publicly Owned Treatment Works (POTW) Pretreatment Program General Provisions
- 1. The Permittee shall implement and enforce its approved Pretreatment Program which was approved on May 29, 1985 and all approved subsequent modifications thereto. The Permittee shall maintain legal authority adequate to fully implement the Pretreatment Program in compliance with Federal (40 CFR 403), State, and local laws and regulations. All definitions in this section unless specifically otherwise defined in this section, are those definitions listed in 40 CFR 403.3. USEPA Region 5 is the Approval Authority for the administration of pretreatment programs in Illinois. The Permittee shall:
 - a. Develop and implement procedures to ensure compliance with the requirements of a pretreatment program as specified in 40 CFR 403.8 (f) (2).

Special Conditions

- b. Carry out independent inspection and monitoring procedures at least once per year, which will determine whether each significant industrial user (SIU) is in compliance with applicable pretreatment standards;
- c. Evaluate whether each SIU needs a slug control plan or other action to control slug discharges. If needed, the SIU slug control plan shall include the items specified in 40 CFR 403.8(f)(2)(vi). For Industrial Users (IUs) identified as significant prior to November 14, 2005, this evaluation must have been conducted at least once by October 14, 2006; additional SIUs must be evaluated within 1 year of being designated an SIU;
- d. Update its inventory of Industrial Users (IUs) at least annually and as needed to ensure that all SIUs are properly identified, characterized, and categorized;
- e. Receive and review self monitoring and other IU reports to determine compliance with all pretreatment standards and requirements, and obtain appropriate remedies for noncompliance by any IU with any pretreatment standard and/or requirement:
- f. Investigate instances of noncompliance, collect and analyze samples, and compile other information with sufficient care as to produce evidence admissible in enforcement proceedings, including judicial action;
- g. Require development, as necessary, of compliance schedules by each industrial user to meet applicable pretreatment standards; and,
- h. Maintain an adequate revenue structure and staffing levels for continued operation of the Pretreatment Program.
- 2. The Permittee shall issue/reissue permits or equivalent control mechanisms to all SIUs prior to expiration of existing permits or prior to commencement of discharge in the case of new discharges. The permits at a minimum shall include the elements listed in 40 CFR § 403.8(f)(1)(iii).
- 3. The Permittee shall develop, maintain, and enforce, as necessary, local limits to implement the general and specific prohibitions in 40 CFR § 403.5 which prohibit the introduction of any pollutant(s) which cause pass through or interference and the introduction of specific pollutants to the waste treatment system from <u>any</u> source of nondomestic discharge.
- 4. In addition to the general limitations expressed in Paragraph 3 above, applicable pretreatment standards must be met by <u>all industrial users</u> of the POTW. These limitations include specific standards for certain industrial categories as determined by Section 307(b) and (c) of the Clean Water Act, State limits, or local limits, whichever are more stringent.
- 5. The USEPA and IEPA individually retain the right to take legal action against any industrial user and/or the POTW for those cases where an industrial user has failed to meet an applicable pretreatment standard by the deadline date regardless of whether or not such failure has resulted in a permit violation.
- 6. The Permittee shall establish agreements with all contributing jurisdictions, as necessary, to enable it to fulfill its requirements with respect to all IUs discharging to its system.
- 7. Unless already completed, the Permittee shall within <u>one (1) year</u> of the effective date of this Permit submit to USEPA and IEPA a proposal to modify and update its approved Pretreatment Program to incorporate Federal revisions to the general pretreatment regulations. The proposal shall include all changes to the approved program and the sewer use ordinance which are necessary to incorporate the revisions of the Pretreatment Streamlining Rule (which became effective on November 14, 2005), which are considered required changes, as described in the Pretreatment Streamlining Rule Fact Sheet 2.0: Required changes, available at: http://cfpub.epa.gov/npdes/whatsnew.cfm?program_id=3. This includes any necessary revisions to the Permittee's Enforcement Response Plan (ERP).
- 8. Within 1 year from the effective date of this permit, the Permittee shall conduct a technical re-evaluation of its local limitations consistent with U.S. EPA's Local Limits Development Guidance (July 2004), and submit the evaluation and any proposed revisions to its local limits to IEPA and U.S. EPA Region 5 for review and approval. U.S. EPA Region 5 requests the Permittee to submit the evaluation and any proposed revisions to its local limits on the spreadsheet found at http://www.epa.gov/region5/water/npdestek/Locallmt.XLS. To demonstrate technical justification for new local industrial user limits or justification for retaining existing limits, the following information must be submitted to U.S. EPA:
 - a. Total plant flow
 - b. Domestic/commercial pollutant contributions for pollutants of concern
 - c. Industrial pollutant contributions and flows
 - d. Current POTW pollutant loadings, including loadings of conventional pollutants
 - e. Actual treatment plant removal efficiencies, as a decimal (primary, secondary, across the wastewater treatment plant)

- f. Safety factor to be applied
- g. Identification of applicable criteria:
 - i. NPDES permit conditions
 - Specific NPDES effluent limitations
 - •Water-quality criteria
 - •Whole effluent toxicity requirements
 - •Criteria and other conditions for sludge disposal
 - ii. Biological process inhibition
 - Nitrification
 - Sludge digester
 - iii. Collection system problems
- h. The Permittee's sludge disposal methods (land application, surface disposal, incineration, landfill)
- i. Sludge flow to digester
- j. Sludge flow to disposal
- k. % solids in sludge to disposal, not as a decimal
- I. % solids in sludge to digester, not as a decimal
- m. Plant removal efficiencies for conventional pollutants
- n. If revised industrial user discharge limits are proposed, the method of allocating available pollutants loads to industrial users
- o. A comparison of maximum allowable headworks loadings based on all applicable criteria listed in g, above
- p. Pollutants that have caused:
 - i. Violations or operational problems at the POTW, including conventional pollutants
 - ii. Fires and explosions
 - iii. Corrosion
 - iv. Flow obstructions
 - v. Increased temperature in the sewer system
 - vi. Toxic gases, vapors or fumes that caused acute worker health and safety problems
 - vii. Toxicity found through Whole Effluent Toxicity testing
 - viii. Inhibition
- q. Pollutants designated as "monitoring only" in the NPDES permit
- r. Supporting data, assumptions, and methodologies used in establishing the information a through g above.
- The Permittee's Pretreatment Program has been modified to incorporate a Pretreatment Program Amendment approved by USEPA on November 21, 1997. The amendment became effective on the date of approval and is a fully enforceable provision of your Pretreatment Program.

Modifications of your Pretreatment Program shall be submitted in accordance with 40 CFR § 403.18, which established conditions for substantial and nonsubstantial modifications. All requests should be sent in electronic format to r5npdes@epa.gov, attention: NPDES Programs Branch.

B. Reporting and Records Requirements

- 1. The Permittee shall provide an annual report briefly describing the permittee's pretreatment program activities over the previous calendar year. Permittees who operate multiple plants may provide a single report providing all plant-specific reporting requirements are met. Such report shall be submitted no later than April 28th of each year to USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: Water Enforcement and Compliance Assurance Branch, and shall be in the format set forth in IEPA's POTW Pretreatment Report Package which contains information regarding:
 - a. An updated listing of the Permittee's significant industrial users, indicating additions and deletions from the previous year, along with brief explanations for deletions. The list shall specify which categorical Pretreatment standards, if any, are applicable to each Industrial User.
 - b. A descriptive summary of the compliance activities including numbers of any major enforcement actions, (i.e., administrative orders, penalties, civil actions, etc.), and the outcome of those actions. This includes an assessment of the compliance status of the Permittee's industrial users and the effectiveness of the Permittee's Pretreatment Program in meeting its needs and objectives.
 - c. A description of all substantive changes made to the Permittee's Pretreatment Program. Changes which are "substantial modifications" as described in 40 CFR § 403.18(c) must receive prior approval from the USEPA.
 - d. Results of sampling and analysis of POTW influent, effluent, and sludge.

- e. A summary of the findings from the priority pollutants sampling. As sufficient data becomes available the IEPA may modify this Permit to incorporate additional requirements relating to the evaluation, establishment, and enforcement of local limits for organic pollutants. Any permit modification is subject to formal due process procedures pursuant to State and Federal law and regulation. Upon a determination that an organic pollutant is present that causes interference or pass through, the Permittee shall establish local limits as required by 40 CFR § 403.5(c).
- 2. The Permittee shall maintain all pretreatment data and records for a minimum of three (3) years. This period shall be extended during the course of unresolved litigation or when requested by the IEPA or the Regional Administrator of USEPA. Records shall be available to USEPA and the IEPA upon request.
- 3. The Permittee shall establish public participation requirements of 40 CFR 25 in implementation of its Pretreatment Program. The Permittee shall at least annually, publish the names of all IU's which were in significant noncompliance (SNC), as defined by 40 CFR § 403.8(f)(2)(viii), in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the Permittee or based on any more restrictive definition of SNC that the POTW may be using.
- 4. The Permittee shall provide written notification to the USEPA, Region 5, 77 West Jackson Blvd., Chicago, Illinois 60604, Attention: NPDES Programs Branch and to the Deputy Counsel for the Division of Water Pollution Control, IEPA, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 within five (5) days of receiving notice that any Industrial User of its sewage treatment plant is appealing to the Circuit Court any condition imposed by the Permittee in any permit issued to the Industrial User by Permittee. A copy of the Industrial User's appeal and all other pleadings filed by all parties shall be mailed to the Deputy Counsel within five (5) days of the pleadings being filed in Circuit Court.

C. Monitoring Requirements

1. The Permittee shall monitor its influent, effluent and sludge and report concentrations of the following parameters on monitoring report forms provided by the IEPA and include them in its annual report. Samples shall be taken at quarterly intervals at the indicated reporting limit or better and consist of a 24-hour composite unless otherwise specified below. Sludge samples shall be taken of final sludge and consist of a grab sample reported on a dry weight basis.

STORE	Γ	Minimum
CODE	PARAMETER	reporting limit
01097	Antimony	0.07 mg/L
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01012	Beryllium	0.005 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hex) (grab not to exceed 24 hours)*	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide* (grab) (available **** or amenable to chlorination)	5.0 ug/L
00720	Cyanide (total) (grab)	5.0 ug/L
00951	Fluoride*	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)*	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (effluent grab)***	1.0 ng/L**
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)*	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01059	Thallium	0.3 mg/L
01092	Zinc	0.025 mg/L

Minimum reporting limits are defined as - (1) The minimum value below which data are documented as non-detects. (2) Three to ten times the method detection limit. (3) The minimum value of the calibration range.

All sample containers, preservatives, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR 136.

- * Influent and effluent only
- **1 ng/L = 1 part per trillion.
- ***Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E, other approved methods may be used for influent (composite) and sludge.
- **** USEPA Method OIA-1677.

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined including all oxidation states. Where constituents are commonly measured as other than total, the phase is so indicated.

- 2. The Permittee shall conduct an analysis for the one hundred and ten (110) organic priority pollutants identified in 40 CFR 122 Appendix D, Table II as amended. This monitoring shall be done annually and reported on monitoring report forms provided by the IEPA and shall consist of the following:
 - a. The influent and effluent shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. The sampling shall be done during a day when industrial discharges are expected to be occurring at normal to maximum levels.

Samples for the analysis of acid and base/neutral extractable compounds shall be 24-hour composites.

Five (5) grab samples shall be collected each monitoring day to be analyzed for volatile organic compounds. A single analysis for volatile pollutants (Method 624) may be run for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than one (1) mL of each grab included in the composite.

Wastewater samples must be handled, prepared, and analyzed by GC/MS in accordance with USEPA Methods 624 and 625 of 40 CFR 136 as amended.

- b. The sludge shall be sampled and analyzed for the one hundred and ten (110) organic priority pollutants. A sludge sample shall be collected concurrent with a wastewater sample and taken as final sludge.
 - Sampling and analysis shall conform to USEPA Methods 624 and 625 and/or USEPA SW-846 Test Methods for Evaluating Solid Wastes unless an alternate method has been approved by IEPA.
- c. Sample collection, preservation and storage shall conform to approved USEPA procedures and requirements.
- 3. In addition, the Permittee shall monitor any new toxic substances as defined by the Clean Water Act, as amended, following notification by the IEPA.
- 4. Permittee shall report any noncompliance with effluent or water quality standards in accordance with Standard Condition 12(f) of this Permit.
- 5. Analytical detection limits shall be in accordance with 40 CFR 136. Minimum detection limits for sludge analyses shall be in accordance with 40 CFR 503. Test method SW-846 is acceptable alternative method.
- D. <u>Pretreatment Reporting</u>

USEPA Region 5 is the Approval Authority for administering the pretreatment program in Illinois. All requests for modification of pretreatment program elements should be submitted in redline/strikeout electronic format and must be sent to USEPA at r5npdes@epa.gov.

Permittee shall upon notice from USEPA, modify any pretreatment program element found to be inconsistent with 40 CFR 403.

<u>SPECIAL CONDITION 11</u>. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 12. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) 001.

Biomonitoring

- A. Acute Toxicity Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.)
 EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:
 - 1. Fish 96 hour static LC₅₀ Bioassay using fathead minnows (Pimephales promelas).
 - 2. Invertebrate 48-hour static LC₅₀ Bioassay using Ceriodaphnia.
- B. Testing Frequency The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit.
- C. Reporting Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit.
- D. Toxicity Should a bioassay result in toxicity to >20% of organisms test in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatments, the Permittee shall immediately notify IEPA in writing of the test results.
- E. Toxicity Reduction Evaluation and Identification Should the biomonitoring program identify toxicity and result in notification by IEPA, the permittee shall develop a plan for toxicity reduction evaluation and identification. The plan shall be developed and implemented in accordance with <u>Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants</u>, EPA/833B-99/002, and shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days of notification of the permittee above or other such date as is received by IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results and toxicity reduction evaluation, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants and additional whole effluent toxicity monitoring to confirm the results of the evaluation. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 13. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 25 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

Special Conditions

The Permittee shall comply with existing federal regulations governing sewage sludge use or disposal and shall comply with all existing applicable regulations in any jurisdiction in which the sewage sludge is actually used or disposed.

The Permittee shall comply with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency Bureau of Water Compliance Assurance Section Mail Code #19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

SPECIAL CONDITION 14.

AUTHORIZATION OF COMBINED SEWER AND TREATMENT PLANT DISCHARGES

The IEPA has determined that at least a portion of the collection system consists of combined sewers. References to the collection system and the sewer system refer only to those parts of the system which are owned and operated by the Permittee unless otherwise indicated. The Permittee is authorized to discharge from the overflows/bypass(es) listed below provided the following terms and conditions are met:

<u>Discharge Number</u> <u>Location</u> <u>Receiving Water</u>

002 STP After Overflow Weir Fox River

CSO Monitoring, Reporting and Notification Requirements

1. The Permittee shall monitor the frequency of discharge (number of discharges per month) and estimate the duration (in hours) of each discharge from each outfall listed in this Special Condition. Estimates of storm duration and total rainfall shall be provided for each storm event.

ſ	Start Date	Rainfall Duration	Rainfall Amount	CSO Outfall #	Outfall	Estimated	Estimated
		(hrs.)	(in.)		Description	Duration of CSO	Volume of CSO
						Discharge	Discharge
						(hrs)	(MG)

For frequency reporting, all discharges from the same storm, or occurring within 24 hours, shall be reported as one. The date that a discharge commences shall be recorded for each outfall. Reports shall be in the form specified by the IEPA and on forms provided by the IEPA (e.g., Form IL 532-2471, or updated form of same). These forms shall be submitted to the IEPA monthly with the DMRs and covering the same reporting period as the DMRs. Parameters (other than flow frequency and volume), if required in this Permit, shall be sampled and reported as indicated in the transmittal letter for such report forms.

2. All submittals listed in this Special Condition can be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

Attention: CSO Coordinator, Compliance Assurance Section

All submittals hand carried shall be delivered to 1021 North Grand Avenue East.

CSO Treatment Requirements

- 3. All combined sewer overflows and treatment plant bypasses shall be given sufficient treatment to prevent pollution and the violation of applicable water quality standards. Sufficient treatment shall consist of the following:
 - a. Treatment as described in PCB 85-224 and dated July 13, 1988 shall be provided; and,
 - b. Any additional treatment, necessary to comply with all applicable water quality based requirements of this permit including, but not limited to, the requirement that discharges from CSOs not cause or contribute to violations of applicable water quality standards or cause use impairment in the receiving waters.
- 4. All CSO discharges authorized by this Permit shall be treated, in whole or in part, to the extent necessary to prevent accumulations of sludge deposits, floating debris and solids in accordance with 35 III. Adm. Code 302.203 and to prevent depression of oxygen levels below the applicable water quality standards.
- 5. Overflows during dry weather are prohibited. Dry weather overflows shall be reported to the IEPA pursuant to Standard Condition 12(f) of this Permit (24 hour notice).
- 6. The collection system shall be operated to optimize transport of wastewater flows to the WWTP and shall be operated to maximize treatment of wastewater flows and to minimize CSOs.
- 7. The treatment system shall be operated to maximize treatment of wastewater flows.

CSO Nine Minimum Controls

- 8. The Permittee shall comply with the nine minimum controls contained in the National CSO Control Policy published in the Federal Register on April 19, 1994. The nine minimum controls are:
 - a. Proper operation and maintenance programs for the sewer system and the CSOs;
 - b. Maximum use of the collection system for storage;
 - c. Review and modification of pretreatment requirements to assure CSO impacts are minimized;
 - d. Maximization of flow to the POTW for treatment;
 - e. Prohibition of CSOs during dry weather;
 - f. Control of solids and floatable materials in CSOs:
 - g. Pollution prevention programs which focus on source control;
 - h. Public notification to ensure that citizens receive adequate information regarding CSO occurrences and CSO impacts; and,
 - Monitoring to characterize impacts and efficiency of CSO controls

A CSO pollution prevention plan (PPP) shall be developed by the Permittee unless one has already been prepared for this collection system. Any previously-prepared PPP shall be reviewed, and revised if necessary, by the Permittee to address the items contained in Chapter 8 of the U.S. EPA guidance document, Combined Sewer Overflows, Guidance For Nine Minimum Controls, and any items contained in previously-sent review documents from the IEPA concerning the PPP. Combined Sewer Overflows, Guidance For Nine Minimum Controls is available on line at http://www.epa.gov/npdes/pubs/owm0030.pdf. The PPP (or revised PPP) shall be presented to the general public at a public information meeting conducted by the Permittee annually during the term of this Permit. The Permittee shall submit documentation that the pollution prevention plan complies with the requirements of this Permit and that the public information meeting was held. Such documentation shall be submitted to the IEPA within twelve (12) months of the effective date of this Permit and shall include a summary of all significant issues raised by the public, the Permittee's response to each issue, and two (2) copies of the "CSO Pollution Prevention Plan Certification" (1) with original signatures. This certification form is available one online http://www.epa.state.il.us/water/permits/waste-water/forms/cso-pol-prev.pdf. Following the public meeting, the Permittee shall implement the pollution prevention plan and shall maintain a current pollution prevention plan, updated to reflect system modifications, on file at the sewage treatment works or other acceptable location and made available to the public. The pollution prevention plan revisions shall be submitted to the IEPA one (1) month from the revision date. The Permittee may coordinate the development/review of the PPP and the public meeting with the City of Aurora.

Sensitive Area Considerations

9. Pursuant to Section II.C.3 of the federal CSO Control Policy of 1994, sensitive areas are any water likely to be impacted by a CSO discharge which include one or more of the following criteria: (1) designated as an Outstanding National Resource Water; (2) found to contain shellfish beds; (3) found to contain threatened or endangered aquatic species or their habitat; (4) used for primary contact recreation; (5) National Marine Sanctuaries; or, (6) within the protection area for a drinking water intake structure.

The IEPA has tentatively determined that none of the outfalls listed in this Special Condition discharge to sensitive areas. However, if information becomes available that causes the IEPA to reverse this determination, the IEPA will notify the Permittee in writing. Upon the date contained in the notification letter, the Permittee shall revise the LTCP and schedule to eliminate or relocate these outfalls. If elimination or relocation is not economically feasible or technically achievable the permittee shall submit a revised plan and schedule for treating the discharge. Such justification shall be in accordance with Section II.C.3 of the National CSO Control Policy.

CSO Operational and Maintenance Plans

10. The IEPA reviewed and accepted a CSO operational and maintenance plan "CSO O&M plan" on May 21, 1997 prepared for this sewerage system. The Permittee shall fully implement the approved plan and review and revise, if needed, the CSO O&M plan to reflect system changes.

The CSO O&M plan shall be presented to the general public at a public information meeting conducted by the Permittee within nine (9) months of the effective date of this Permit or within nine (9) months of the CSO system being modified. The Permittee shall submit documentation that the CSO O&M plan complies with the requirements of this Permit and that the public information meeting was held. Such documentation shall be submitted to the IEPA within twelve (12) months of the effective date of this Permit or within three (3) months of the public meeting and shall include a summary of all significant issues raised by the public, the Permittee's response to each issue, and two (2) copies of the "CSO Operational Plan Checklist and Certification", one (1) with original signatures. Copies of the "CSO Operational Plan Checklist and Certification" are available online at http://www.epa.state.il.us/water/permits/waste-water/forms/cso-checklist.pdf. Following the public meeting, the Permittee shall maintain a current CSO O&M plan, updated to reflect system modifications, on file at the sewage treatment works or other acceptable location and made available to the public. The CSO O&M plan revisions shall be submitted to the IEPA one (1) month from the revision date. The Permittee may coordinate the review of the CSO O&M and the public meeting with the City of Aurora.

The objectives of the CSO O&M plan are to reduce the total loading of pollutants and floatables entering the receiving stream and to ensure that the Permittee ultimately achieves compliance with water quality standards. These plans, tailored to the local government's collection and waste treatment systems, shall include mechanisms and specific procedures where applicable to ensure:

- a. Collection system inspection on a scheduled basis:
- b. Sewer, catch basin, and regulator cleaning and maintenance on a scheduled basis;
- c. Inspections are made and preventive maintenance is performed on all pump/lift stations;
- d. Collection system replacement, where necessary;
- e. Detection and elimination of illegal connections;
- f. Detection, prevention, and elimination of dry weather overflows;
- g. The collection system is operated to maximize storage capacity and the combined sewer portions of the collection system are operated to delay storm entry into the system; and,
- h. The treatment and collection systems are operated to maximize treatment.

Sewer Use Ordinances

- 11. The Permittee, within six (6) months of the effective date of this Permit, shall review and where necessary, modify its existing sewer use ordinance to ensure it contains provisions addressing the conditions below. If no ordinance exists, such ordinance shall be developed, adopted, and implemented within six (6) months from the effective date of this Permit. Upon completion of the review of the sewer use ordinance(s), the Permittee shall submit two (2) copies of a completed "Certification of Sewer Use Ordinance Review", one (1) copy with original signatures. Copies of the certification form can be obtained on line at http://www.epa.state.il.us/water/permits/waste-water/forms/sewer-use.pdf. The Permittee shall submit additional copies of the sewer use ordinance(s) to the IEPA upon written request. Sewer use ordinances must contain specific provisions to:
 - a. Prohibit introduction of new inflow sources to the sanitary sewer system;
 - b. Require that new sanitary sewer construction tributary to the combined sewer system be designed to minimize and/or delay inflow contribution to the combined sewer system;
 - c. Require that inflow sources on the combined sewer system be connected to a storm sewer, in accordance with the approved Long Term Control Plan;
 - d. Provide that any new building domestic sewage connection shall be distinct from the building inflow connection;
 - e. Assure that CSO impacts from industrial and/or commercial sources are minimized and control by determining which industrial and/or commercial discharges that are tributary to CSOs; and,
 - f. Assure that the owners of all publicly owned systems with sewers tributary to the Permittee's collection system have procedures in place adequate to ensure that the objectives, mechanisms, and specific procedures given in Paragraph 10 of this Special Condition are achieved.

The Permittee shall enforce the applicable sewer use ordinances

CSO Long-Term Control Planning and Compliance with Water Quality Standards

- 12. A. Pursuant to Section 301 of the federal Clean Water Act, 33 U.S.C. § 1311 and 40 CFR § 122.4, discharges from the CSOs, including the outfalls listed in this Special Condition and any other outfall listed as a "Treated Combined Sewage Outfall", shall not cause or contribute to violations of applicable water quality standards or cause use impairment in the receiving waters. In addition, discharges from CSOs shall comply with all applicable parts of 35 III. Adm. Code 306.305(a), (b), (c), and (d).
 - B. This is a Phase II Permit under USEPA's 1994 CSO Policy requiring implementation of the LTCP submitted by the Permittee to the IEPA on March 31, 2010, revised November 17, 2011, October 27, 2012, and December 3, 2012. The LTCP, once implemented, is presumed to comply with Section 11.c.4.a.i of the federal CSO Control Policy by limiting the discharge from the CSO to no more than an average of four (4) overflow events per year. The implementation schedule can be found under the Additional Action Items and Required Reporting of this Special Condition (Item 15.b). The LTCP construction and operational implementation to meet the presumptive approach shall be completed by December 31, 2019. All provisions of this Special Condition shall stay in effect prior to and after completion of construction. Progress reports shall be submitted to the Agency six (6) months from the effective date of this Permit and every six (6) months thereafter.
 - C. The Fox River shall be monitored upstream and downstream of the outfalls during construction and as described in the plan. The results of the sampling shall be submitted to the Agency with the progress reports. Upon completion of construction, post-construction monitoring shall be implemented for a twenty-four (24) month period. Within thirty (30) months of completion of construction, the results shall be submitted to the IEPA along with recommendations and conclusions as to whether or not the discharges from any of the CSOs (treated or untreated) authorized by this Permit are causing or contributing to violations of applicable water quality standards or causing use impairment in the receiving water(s).
 - D. Should the results of the post-construction water quality monitoring plan or if information becomes available that causes IEPA to conclude that the discharges from any of the CSOs (treated or untreated) authorized to discharge under this Permit are causing or contributing to violations of water quality standards or are causing use impairment in the receiving water(s), the IEPA will notify the Permittee in writing. Upon receiving such notification, the Permittee shall develop and implement a revised CSO Long-Term Control Plan (LTCP) for assuring that the discharges from the CSOs (treated or untreated) authorized in this Permit comply with the provisions of Paragraph 10.A above. The revised LTCP shall

contain all applicable elements of Paragraph 10.E below including a schedule for implementation and provisions for re-evaluating compliance with applicable standards and regulations after implementation. Two (2) copies of the revised LTCP shall be submitted to the IEPA within twelve (12) months of receiving the IEPA written notice. The LTCP shall be:

- 1. Consistent with Section II.C.4.a.i of the Policy; or,
- 2. Consistent with either Section II.C.4.a.ii, Section II.C.4.a.iii, or Section II.C.4.b of the Policy and be accompanied by data sufficient to demonstrate that the LTCP, when completely implemented, will be sufficient to meet water quality standards.
- E. Pursuant to the Policy, the required components of the LTCP include the following:
 - 1. Characterization, monitoring, and modeling of the Combined Sewer System (CSS);
 - 2. Consideration of Sensitive Areas:
 - Evaluation of alternatives;
 - Cost/Performance considerations;
 - 5. Revised CSO Operational Plan;
 - 6. Maximizing treatment at the treatment plant;
 - 7. Implementation schedule;
 - 8. Post-Construction compliance monitoring program; and
 - 9. Public participation.

Following submittal of the revised LTCP, the Permittee shall respond to any initial IEPA review letter in writing within ninety (90) days of the date of such a review letter, and within thirty (30) days of any subsequent review letter(s), if any. Implementation of the revised LTCP shall be as indicated by IEPA in writing or other enforceable mechanism.

- 13. A public notification program in accordance with Section II.B.8 of the federal CSO Control Policy of 1994 shall be developed employing a process that actively informs the affected public. The program shall include at a minimum public notification of CSO occurrences and CSO impacts, with consideration given to including mass media and/or Internet notification. The Permittee shall post and maintain signs in waters likely to be impacted by CSO discharges at the point of discharge and at points where these waters are used for primary contact recreation. Signage's message should be visible from both shoreline and water vessel approach (if appropriate), respectively. Provisions shall be made to include modifications of the program when necessary and notification to any additional member of the affected public. The program shall be presented to the general public at a public information meeting conducted by the Permittee. The Permittee shall conduct the public information meeting providing a summary and status of the CSO control program annually during the term of this Permit. The Permittee shall submit documentation that the public information meeting was held, shall submit a summary of all significant issues raised by the public and the Permittee's response to each issue, and shall identify any modifications to the program as a result of the public information meeting within 60 days of holding the public meeting. The Permittee shall submit copies of the public notification program to the IEPA upon written request. The Permittee may coordinate the development of the public notification plan and the public meeting with the City of Aurora.
- 14. If any of the CSO discharge points listed in this permit are eliminated, or if additional CSO discharge points, not listed in this permit, are discovered, the Permittee shall notify the IEPA in writing within one (1) month of the respective outfall elimination or discovery. Such notification shall be in the form of a request for the appropriate modification of this NPDES Permit.
- 15. Summary of Compliance Dates in this CSO Special Condition
- a. The following summarizes the dates that submittals contained in this Special Conditions are due to the IEPA (unless otherwise indicated):

Submission of Monitoring Data (Paragraph 1)

25th of every month

Elimination of a CSO or Discovery of Additional CSO Locations (Paragraph 14)

1 month from discovery or elimination

Certification of Sewer Use Ordinance Review (Paragraph 11)

6 months from the effective date of this Permit

Conduct Pollution Prevention and PN Public Information Meeting (Paragraphs 8 and 13) Annually

No Submittal Due with this Milestone

Conduct OMP Public Information Meeting (Paragraphs 10)

No Submittal Due with this Milestone

9 months from the effective date of this Permit

Submit Pollution Prevention and OMP Plan

(Paragraphs 8 and 10)

12 months from the effective date of this Permit

Submit PN Information Meeting Summary (Paragraph 13)

60 days after public meeting

CSO Long-Term Control Plan (Paragraph 12)

Complete LTCP Construction to meet Presumptive Approach

and Implement Full Operation

December 31, 2019

b. Additional Action Items and Required Reporting

Progress Reports Six months from the effective date and every six

months thereafter April 30, 2017

Phase 2 Waubonsie Interceptor Construction Complete

Phase 2 South Facility Construction Complete
Phase 2 North Facility Construction Complete

December 31, 2018

December 31, 2019

Submit Results of Post-Construction Monitoring Plan (Paragraph 12)

30 months after completion of final construction project needed to meet presumptive approach.

All submittals listed in this Special Condition can be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section

All submittals hand carried shall be delivered to 1021 North Grand Avenue East.

Reopening and Modifying this Permit

16. The IEPA may implement a modification for this Permit at any time to include requirements and compliance dates which have been submitted in writing by the Permittee and approved by the IEPA, or other requirements and dates which are necessary to carry out the provisions of the Illinois Environmental Protection Act, the Clean Water Act, or regulations promulgated under those Acts. Public Notice of such modifications and opportunity for public hearing shall be provided.

<u>SPECIAL CONDITION 15</u>. This Permit may be modified to include alternative or additional final effluent limitations pursuant to either an approved Total Maximum Daily Load (TMDL) Study or an approved Fox River Implementation Plan.

<u>SPECIAL CONDITION 16</u>. The Permittee shall participate in the Fox River Study Group (FRSG). The Permittee shall work with other watershed members of the FRSG to determine the most cost effective means to remove dissolved oxygen (DO) and offensive condition impairments in the Fox River. This Permit may be modified to include additional conditions and effluent limitations to include implementation measures based on the Fox River Implementation Plan (Implementation Plan). The following tasks will be completed during the life of this permit:

- a. The Permittee shall prepare a phosphorus removal feasibility report specific to its plant(s) on the method, time frame and costs for reducing its loading of phosphorus to levels equivalent to monthly average discharges of 1 mg/L, 0.5 mg/L, and 0.1 mg/L on a seasonal basis and on a year round basis. The feasibility report shall be submitted to the IEPA twelve (12) months from the effective date of the Permit. The feasibility report shall also be shared with the FRSG.
- b. The Permittee shall submit the Fox River Study Group Watershed Investigation Phase III Report, which includes stream modeling, to the IEPA within 1 month of the effective date of this Permit.
- c. The FRSG will complete an Implementation Plan that identifies phosphorus input reductions by point source discharges, non-point source discharges and other measures necessary to remove DO and offensive condition impairments in the Fox River. The Implementation Plan shall be submitted to the IEPA by December 31, 2015. The Permittee shall initiate the recommendations of the Implementation Plan that are applicable to said Permittee during the remaining term of this Permit. This Permit may be modified to include additional pollutant reduction activities necessary to implement the Implementation Plan.
- d. In its application for renewal of this permit, the Permittee shall consider and incorporate recommended FRSG phosphorus input reduction implementation projects that the Permittee will implement during the next permit term.
- e. The Permittee shall operate the existing facilities to optimize the removal of phosphorus.

<u>SPECIAL CONDITION 17</u>. The Permittee shall monitor the wastewater effluent for Total Phosphorus, Dissolved Phosphorus, Nitrate/Nitrite, Total Kjeldahl Nitrogen (TKN), Ammonia, Total Nitrogen (calculated), Alkalinity and Temperature at least once a month beginning on the effective date of this permit. The results shall be submitted on Discharge Monitoring Report (DMR) Forms or NetDMRs to IEPA unless otherwise specified by the IEPA.

SPECIAL CONDITION 18. A phosphorus limit of 1.0 mg/L (Annual Average) shall become effective six (6) years from the effective date of this Permit.

In order for the Permittee to achieve the above limit, it will be necessary to modify existing treatment facilities to include phosphorus removal, reduce phosphorus sources or explore other ways to prevent discharges that exceed the limit. The Permittee must implement the following compliance measures consistent with the schedule below:

A.	Interim Report on Phosphorus Removal Feasibility Report	6 months from the effective date of this Permit
B.	Phosphorus Removal Feasibility Report submitted	12 months from the effective date of this Permit
C.	Progress Report on Phosphorus Input Reductions and Implementation Plan	18 months from the effective date of this Permit
D.	Progress Report on Recommendations of Implementation Plan	24 months from the effective date of this Permit
E.	Plans and specifications submitted	29 months from the effective date of this Permit
F.	Progress Report on Construction	36 months from the effective date of this Permit
G.	Progress Report on Construction	42 months from the effective date of this Permit
Н.	Progress Report on Construction	48 months from the effective date of this Permit
I.	Progress Report on Construction	54 months from the effective date of this Permit
J.	Complete Construction	60 months from the effective date of this Permit
K.	Progress Report on Optimizing Treatment System	66 months from the effective date of this Permit
L.	Achieve Annual Concentration and Loading Effluent Limitation for Total Phosphorus	72 months from the effective date of this Permit

Compliance dates may be modified based on the results of the Phosphorus Removal Feasibility Report required by Special Condition 16 of this Permit. All modifications of this Permit must be in accordance with 40 CFR 122.62 or 40 CFR 122.63.

Reporting shall be submitted on the DMR's on a monthly basis.

REPORTING

The Permittee shall submit progress reports for items A, B, C, D, E, F, G, H, I J, K, and L of the compliance schedule indicating: a) the date the item was completed, or b) that the item was not completed, the reasons for non-completion and the anticipated completion date to the Agency Compliance Section.

<u>SPECIAL CONDITION 19.</u> The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD_5 , $CBOD_5$, suspended solids, ammonia and pH due to sustained compliance. The IEPA will require that the influent and effluent sampling frequency for these parameters be increased to 5 days/week if effluent deterioration occurs due to increased wasteload, operational, maintenance or other problems. The increased monitoring will be required <u>Without Public Notice</u> when a permit modification is received by the Permittee from the IEPA.

<u>SPECIAL CONDITION 20.</u> The permittee may continue to perform an instream water quality study of the Fox River in order to obtain site specific data for pH and temperature downstream of the treatment plant Outfall 001. The study, if performed, shall be conducted in accordance with the <u>Site Specific Fox River Ammonia-Nitrogen Water Quality Study Project Plan</u> which was approved by the Agency on May 26, 2004.

SPECIAL CONDITION 21. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement back-ups and ensuring that overflows or back-ups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewers are expressly prohibited by III. Adm. Code 306.304. In order to accomplish these goals, the Permittee shall develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management strategy within twelve (12) months of the effective date of this Permit or review and revise any existing plan accordingly. The permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan as soon as possible. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they were designed.

The CMOM plan shall include the following elements:

A. Measures and Activities:

- 1. A complete map and system inventory for the collection system owned and operated by the Permittee;
- 2. Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
- 3. Documentation of unplanned maintenance;
- 4. An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and back-ups occur or are likely to occur; use flow monitoring as necessary:
- 5. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee;
- 6. Scheduled inspections and testing;
- 7. The Permittee shall develop and implement an Asset Management strategy to ensure the long-term sustainability of the collection system. Asset management shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace or rehabilitate particular assets and develop long-term funding strategies; and
- 8. Asset management shall include but is not limited to the following elements:
 - a. Asset Inventory and State of the Asset;
 - b. Level of Service:
 - c. Critical Asset Identification;
 - d. Life Cycle Cost; and
 - e. Long-Term Funding Strategy.

B. Design and Performance Provisions:

- Monitor the effectiveness of CMOM;
- 2. Upgrade the elements of the CMOM plan as necessary; and
- 3. Maintain a summary of CMOM activities.

C. Overflow Response Plan:

1. Know where overflows and back-ups within the facilities owned and operated by the Permittee occur;

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- 2. Respond to each overflow or back-up to determine additional actions such as clean up; and
- 3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow /infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.

D. System Evaluation Plan:

- 1. Summary of existing SSO and Excessive I/I areas in the system and sources of contribution;
- 2. Evaluate plans to reduce I/I and eliminate SSOs;
- 3. Special provisions for Pump Stations and force mains and other unique system components; and
- 4. Construction plans and schedules for correction.

E. Reporting and Monitoring Requirements:

- 1. Program for SSO detection and reporting; and
- 2. Program for tracking and reporting basement back-ups, including general public complaints.

F. Third Party Notice Plan:

- 1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;
- 2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
- 3. Identifies who shall receive the notification;
- 4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
- 5. Includes a description of the lines of communication; and
- 6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

For additional information concerning USEPA CMOM guidance and Asset Management please refer to the following web site addresses. http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf and http://water.epa.gov/type/watersheds/wastewater/upload/guide_smallsystems assetmanagement bestpractices.pdf

<u>SPECIAL CONDITION 22</u>. This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

<u>SPECIAL CONDITION 23</u>. Discharge Number 003 (after the intake screens) is an emergency high level outfall. Discharges from this outfall are prohibited. These prohibited discharges, if they occur, are subject to conditions A - E listed below.

(A) Definitions

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a discharge. Severe property damage does not mean economic loss caused by delays in production.

(B) Notice

- (1) Anticipated discharge. If the Permittee knows in advance of the need for a prohibited discharge from Discharge Number 003, it shall submit prior notice, if possible at least ten days before the date of the discharge.
- (2) Unanticipated discharge. The Permittee shall submit notice of an unanticipated discharge as required in Standard Condition 12(f) of this Permit (24-hour notice).
- (C) Limitation on IEPA enforcement discretion. The IEPA may take enforcement action against a Permittee for prohibited discharges from Discharge Number 003, unless:
 - Discharge was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There was no feasible alternative to the discharge, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a discharge which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The Permittee submitted notices as required under Standard Condition 12(f) of this Permit.

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- (D) Emergency discharges when discharging, shall be monitored daily by grab sample for BOD₅, Suspended Solids and Fecal Coliform. The Permittee shall submit the monitoring results on Discharge Monitoring Report forms using one such form for each month in which discharging occurs. The Permittee shall specify the number of discharges per month that occur and shall report this number in the quantity daily maximum column. The Permittee shall report the highest concentration value of BOD₅, Suspended Solids and Fecal Coliform discharged in the concentration daily maximum column.
- (E) The above limitations on enforcement discretion apply only with respect to IEPA. They do not serve as a limitation on the ability of any other governmental agency or person to bring an enforcement action in accordance with the Federal Clean Water Act.